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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/648,054

08/26/2003

Matthew Russell

03-0154

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24319 7590 02/10/2006

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EXAMINER

ANDUJAR, LEONARDO

ART UNIT

PAPER NUMBER

2826

DATE MAILED: 02/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/648,054

Applicant(s)

RUSSELL ET AL.

Examiner

Leonardo Andújar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 December 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6, 8, 12 and 13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 6, 8, 12 and 13 is/are rejected.
- 7) ☐ Claim(s) 2-5 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/18/2005 has been entered.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 6, 8, 12 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Keeth (US 5,864,181).

4. Regarding claim 1, Keeth (e.g. attached figure 3) shows a power bus layout comprising: a first electrically conductive layer (level 2) including a first bus 12a and a second bus 12b; a second electrically conductive layer (level 3) including a power first bus 18 and a second bus 16; an electrically insulating layer disposed between the first and second electrically conductive layer (col. 3/lls. 11-26); a plurality of vias through the electric insulating layer conductively connecting the first electrically conductive layer and the second electrically conductive layer and arranged such that the first bus 12a and the

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second bus 12b of the first electrically conductive layer are electrically connected; and the first and second electrically conductive layers and the vias are configured such that the second bus 12b of the first electrically conductive layer is ultimately electrically connected to the first bus 18 of the second electrically conductive layer yet the vias do not extend from the second bus 12b of the first electrically conductive layer to the first bus 18 of the second electrically conductive layer.

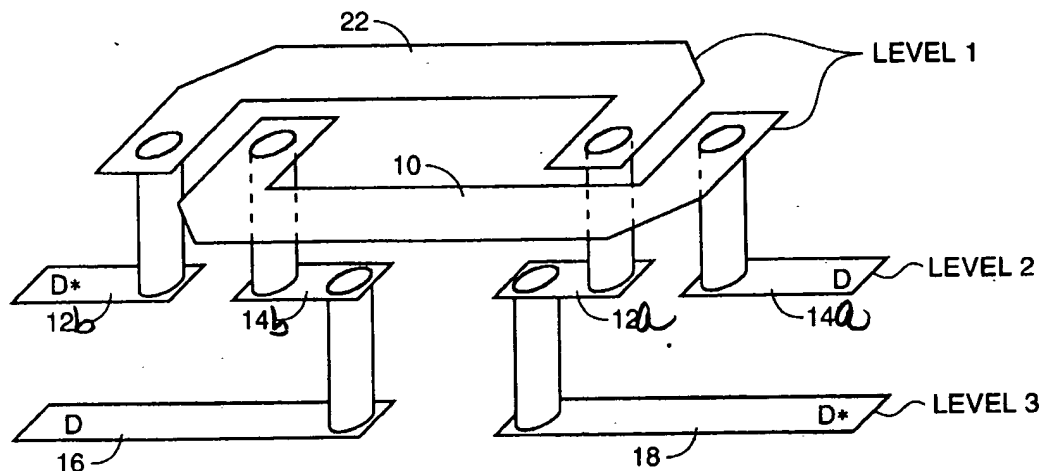


FIG. 3

5. Regarding claim 6, Keeth (e.g. attached fig. 3) shows a bus layout comprising: a first electrically conductive layer (level 3) including a plurality of buses (16,18) not conductively connected to each other on the first electrically conductive layer; a second electrically conductive layer (level 2) including a plurality of buses not conductively connected to each other on the second electrically conductive layer (e.g. 12b, 14a, 14b, 12a); an electrically insulating material disposed between the first electrically conductive layer and the second electrically conductive layer (col. 3/lls. 11-26); wherein at least one bus 18 of the first electrically conductive layer is conductively connected to at least two buses (12a, 12b) on the second electrically conductive layer through the electrically insulating layer and the at least one bus of the first conductive layer not overlap at least two buses ( e.g. 12a, 14b) of the second electrically conductive layer.

6. Regarding claim 8, Keeth shows a plurality of vias through the electrically insulating layer. The vias conductively connect at least one bus of the first electrically conductive layer to at least one bus on the second electrically conductive layer.

7. Regarding claims 12 and 13, Keeth (e.g. attached fig. 3) shows a bus layout design comprising: a first electrically conductive layer (level 2) including at least a first bus and a second bus; a second electrically conductive layer (level 3) including at least a first bus 18 and a second bus 16; an electrically insulating layer disposed between the first electrically conductive layer and the second electrically conductive layer (col. 3/lls. 11-26); a plurality of vias extending through the electrically insulating layer conductively connecting the first electrically conductive layer and the second electrically conductive

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layer; and wherein each of the bus of the first electrically conductive layer does not overlap each bus of the second electrically conductive layer. Note that the second bus (e.g. 12b) of the first electrically conductive layer does not overlap the first bus 18 of the second electrically conductive layer.

***Allowable Subject Matter***

8. Claims 2-5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

9. Applicant's arguments with respect to claims 1, 6, 12 and 13 have been considered but are moot in view of the new ground(s) of rejection.

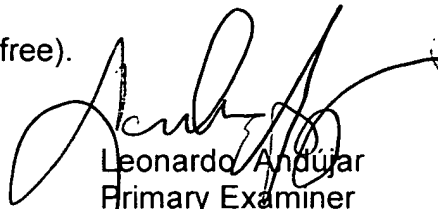
***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonardo Andújar whose telephone number is 571-272-1912. The examiner can normally be reached on Mon through Thu from 9:00 AM to 7:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan J. Flynn can be reached on 571-272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Leonardo Andujar  
Primary Examiner  
Art Unit 2826